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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,224	07/10/2003	Jonas Lundberg	4010-30	2247
23117 7590 12/31/2007 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER VYAS, ABHISHEK	
			ART UNIT	PAPER NUMBER
			3691	
			MAIL DATE	DELIVERY MODE
			12/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/616,224	LUNDBERG ET AL.	
	Examiner	Art Unit	
	Abhishek Vyas	3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/04/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This action is in reply to the amendments and remarks regarding application 10/616,224 filed on 04 October 2007. This action is made **FINAL**.
2. Claims 1-11 have been amended.
3. Claims 1-11 are currently pending and have been examined.
4. Claims 1-11 are rejected.

Information Disclosure Statement

5. The Information Disclosure Statement filed on 10/04/2007 has been considered. An initialed copy of the Form 1449 is enclosed herewith.

Summary of this Office Action

6. Applicants' amendment and arguments filed on 04 October 2007 have been fully considered and are moot based on the new ground(s) of rejection necessitated by amendment. Therefore, claims 1-11 are rejected as being unpatentable over the art cited below, and Applicants' request for allowance is respectfully denied.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-4, 7-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Narayan et al.

United States Patent Application Publication No.: 2002/0026399 and Roberts et al. United States Patent 4,648,038 in view of Mosler et al United States Patent No.: 6,304,858 B1.

9. **As per Claim 1**, Narayan et al disclose the following limitations:

- a matching processor having an associated memory forming an orderbook wherein both fixed-income instruments paying a coupon referred to as bonds, and fixed-income instruments not paying a coupon, referred to as stripped bonds, are traded (see at least Narayan paragraphs 0011, 0013, 0016, 0020, 0026, 0049).

Narayan, does not disclose the following limitation. Mosler, however, teaches the limitation as follows:

- a data processing module for deriving prices for a bond using information from stripped bonds (see at least Mosler column 23, lines 26-30, lines 36-44).

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the system of Narayan to specifically include deriving bond prices from information related to stripped bonds. One would be motivated to do so to accurately match orders and provide the customer the required hedge or return on investment (see at least Mosler column 22, lines 60-63). It is further pointed out that Narayan, inherently discloses an orderbook in the form of an electronic database that receives, stores, matches and processes orders from users (see Narayan paragraph 0020, 0022, 0026). It is also well known in the art that trading zero-coupon bonds or stripped bonds is analogous to trading bonds. Zero coupon bonds are a subset of coupon bonds.

10. **As per claims 2 and 7**, Narayan discloses the following limitations:

- *receiving from a trader a bond order to buy or sell a bond* (see at least Narayan paragraphs 0016, 0026).

Narayan does not specifically disclose the following limitation. Mosler, however, teaches:

- *matching said bond order against a number of stripped bonds that aggregated forms a bond corresponding to said bond order (see at least Mosler column 23, lines 20-23; column 25, lines 29-36).*

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the system of Narayan to specifically incorporate various units of securities that match the characteristics of the bond order and the available securities within the system. One would be motivated to do so to increase the efficiency of the trade process, reduce the element of human error through automation, provide the best possible match results for an optimum return of investment and hedge against risk (see at least Mosler column 22, lines 59-63).

11. As per claims 3 and 8, Narayan discloses the following limitations:

- *Matching the received order against bids or offers for conventional bonds (see at least Narayan paragraphs 0011, 0013, 0016).*

12. As per claims 4 and 9, Narayan discloses a trading system with specified parameters for the security to be traded. Narayan, does not disclose the following limitation. Mosler, however, teaches the following limitations:

- *Before the bond order is matched against a number of aggregated stripped bonds checking if there is a current price for all required stripped bonds (see at least Mosler column 24, lines 28-34).*

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the system of Narayan to specifically include checking the current price. One would be motivated to do so to provide the best possible trading price or margin and hence a better return on the investment or trade (see at least Mosler column 24, lines 39-43). It is also well known in the art and inherent to check the latest prices before executing the trade to give the customer the best price of an option and reduce any losses.

13. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narayan et al.

United States Patent Application Publication No.: 2002/0026399 and Roberts et al. United States

Patent 4,648,038 in view of Mosler et al United States Patent No.: 6,304,858 B1 in further view of Halpern United States Patent Application Publication No.: 2002/0035532 A1.

14. **As per claims 5 and 10**, Narayan discloses a trading system with user specified parameters for the security to be traded. Narayan, does not disclose the limitation below. Halpern, however, teaches the following limitations:

- *if a price exists for all required stripped bonds but one, generating a derived order for the missing stripped bond* (see Halpern paragraphs 0052, 0053, 0056, 0058).

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the system of Narayan to include matching and deriving orders for bonds and stripped bonds. One would be motivated to do so to provide a customer with a useful method to hedge their risk or make a profit on their investment through accessing a broader range of bonds, stripped or non-stripped and/ or a combination of both (see Halpern paragraph 0002).

15. **Claims 6 and 11 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Narayan et al. United States Patent Application Publication No.: 2002/0026399 in view of Roberts et al. United States Patent 4,648,038 and further in view of Halpern United States Patent Application Publication No.: 2002/0035532 A1.

16. **As per claim 6**, Narayan teaches the following limitations:

- *receiving a stripped bond order to buy or sell a stripped bond* (see at least Narayan paragraphs 0016, 0026).
- *matching said stripped bond order against existing bids or offers* (see at least paragraphs 0026, 0030, 0052).

Narayan does not teach the following limitations. Halpern, however, discloses the following

- *when said matching occurs for a pending bid or offer resulting from a derived order generated in response to trying to match a bond order for a bond against a number of stripped bonds forming a combination trade between all stripped bonds required for a*

match against said bond order, including said stripped bond order, and said bond (see at least Halpern paragraphs 0016, 0022 and 0025).

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the system of Narayan to combine trading of multiple stripped bonds matching a bond order placed by a customer. One would be motivated to do so to optimize the trading process and to encourage quick and convenient transactions resulting in profitable returns on the investments. It would make investing in such instruments more cost effective. It is also well known in the art that bond trading is analogous to stripped bond trading. Stripped bonds are a subset of bonds.

17. **As per claim 11**, Narayan teaches the following limitations:

- *receive a stripped bond order to buy or sell a stripped bond (see at least Narayan paragraphs 0016,0022)*

Narayan does not specifically teach the following. Halpern, however, teaches the following limitations:

- *match said stripped bond order against existing bids or offers such that when said matching occurs for a pending bid or offer resulting from a derived order generated in response to trying to match a bond order for a bond against a number of stripped bonds and form as a combination trade between all stripped bonds required for a match against said bond order, including said stripped bond order, and said bond (see Halpern paragraphs 0016, 0025, 0028).*

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the system of Narayan to incorporate specifically, means for trading of multiple stripped bonds matching a bond order placed by a customer. One would be motivated to do so to optimize the trading process for quicker and convenient transactions resulting in profitable returns on the investments. It would make investing in such instruments more cost effective. Automation would lead to less human errors as well as a high degree of accuracy in processing the orders.

Application/Control Number:
10/616,224
Art Unit: 3691

Page 7

Conclusion

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abhishek Vyas whose telephone number is 571-270-1836. The examiner can normally be reached on 7:30am-5:00pm EST Mon-Thur, ALT Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abhishek Vyas
17 December 2007
AV



HANI M. KAZIMI
PRIMARY EXAMINER